1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x+3}{4} - \frac{7x+5}{8} = \frac{5x+4}{6}$$

A. $x \in [-13.2, -11.3]$

B. $x \in [1.2, 1.8]$

C. $x \in [-1.7, -0.9]$

D. $x \in [-1, 0.6]$

E. There are no real solutions.

---

2. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain $m$ and $b$.

Perpendicular to $3x + 4y = 4$ and passing through the point $(-7, 3)$.

A. $m \in [0.97, 1.75]$ $b \in [9, 12]$

B. $m \in [-1.67, -0.91]$ $b \in [-7.33, -5.33]$

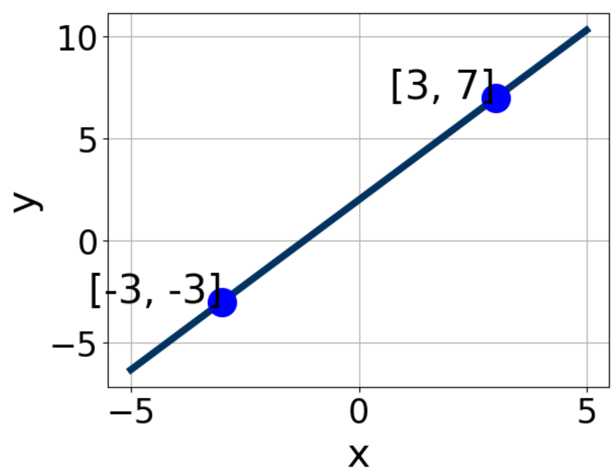
C. $m \in [0.97, 1.75]$ $b \in [-19.33, -11.33]$

D. $m \in [0.66, 1.09]$ $b \in [12.33, 15.33]$

E. $m \in [0.97, 1.75]$ $b \in [12.33, 15.33]$

---

3. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and $C$.




A. $A \in [3.8, 6.1], \quad B \in [1.6, 3.2], \text{ and } \quad C \in [5.2, 6.9]$

B. $A \in [-6, -4.7], \quad B \in [1.6, 3.2], \text{ and } \quad C \in [5.2, 6.9]$

C. $A \in [-2.8, -1.3], \quad B \in [-1.96, 0.04], \text{ and } \quad C \in [-5.7, -1]$

D. $A \in [-2.8, -1.3], \quad B \in [-0.43, 1.42], \text{ and } \quad C \in [1.2, 3.9]$

E. $A \in [3.8, 6.1], \quad B \in [-5.33, -1.85], \text{ and } \quad C \in [-7.2, -4.8]$

---

4. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain $m$ and $b$.

$$(-11, 8) \text{ and } (2, 2)$$

A. $m \in [-1.54, 0.12] \quad b \in [-4.35, -2.3]$

B. $m \in [-1.54, 0.12] \quad b \in [18.24, 19.45]$

C. $m \in [-1.54, 0.12] \quad b \in [-0.88, 0.95]$

D. $m \in [-1.54, 0.12] \quad b \in [2.36, 3.43]$

E. $m \in [-0.35, 1.07] \quad b \in [1.04, 1.74]$

---

5. Solve the equation below. Then, choose the interval that contains the solution.

$$-3(12x + 17) = -4(18x - 7)$$

A. $x \in [-0.46, 0.59]$

B. $x \in [-1.71, -0.3]$

C. $x \in [0.58, 1.15]$

D. $x \in [2.03, 2.62]$

E. There are no real solutions.

---

6. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain $m$ and $b$.

$$(11, 2) \text{ and } (5, -3)$$

A. $m \in [-0.2, 1.7] \quad b \in [-8.08, -7.75]$

B. $m \in [-0.2, 1.7] \quad b \in [6.77, 8.18]$

C. $m \in [-0.2, 1.7] \quad b \in [-9.51, -8.91]$

D. $m \in [-0.2, 1.7] \quad b \in [-7.19, -6.58]$

E. $m \in [-3.5, -0.4] \quad b \in [0.75, 1.58]$

---

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x-3}{6} - \frac{7x+4}{3} = \frac{-5x-5}{4}$$

A. $x \in [7.5, 9.7]$

B. $x \in [-1, 0.4]$

C. $x \in [-8.8, -6.4]$

D. $x \in [-2.5, -1.5]$

E. There are no real solutions.

---

8. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain $m$ and $b$.

   Perpendicular to $7x + 3y = 8$ and passing through the point $(-8, 2)$.

   A. $m \in [2.15, 2.99] \quad b \in [4.8, 6.6]$

   B. $m \in [0.34, 0.8] \quad b \in [8.3, 12.4]$

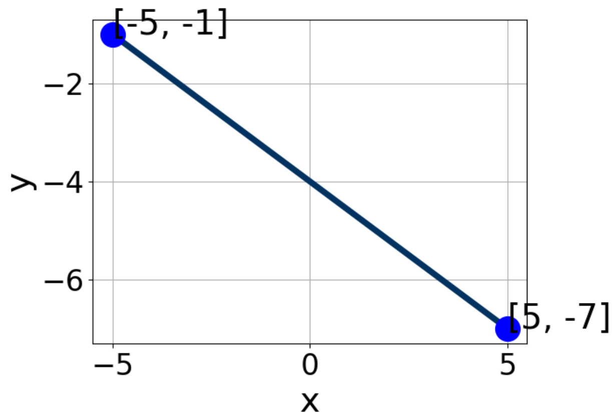
   C. $m \in [0.34, 0.8] \quad b \in [-5.9, -3]$

   D. $m \in [0.34, 0.8] \quad b \in [4.8, 6.6]$

   E. $m \in [-0.91, -0.08] \quad b \in [-1.6, -0.9]$

---

9. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and $C$.




   A. $A \in [-0.2, 2.6], \quad B \in [0.71, 1.37], \text{ and } \quad C \in [-8, -1]$

   B. $A \in [1.9, 5.1], \quad B \in [-5.68, -4.25], \text{ and } \quad C \in [20, 25]$

   C. $A \in [-0.2, 2.6], \quad B \in [-1.54, 0.53], \text{ and } \quad C \in [4, 9]$

   D. $A \in [-3.8, -2.3], \quad B \in [-5.68, -4.25], \text{ and } \quad C \in [20, 25]$

   E. $A \in [1.9, 5.1], \quad B \in [4.46, 6.38], \text{ and } \quad C \in [-21, -17]$

---

10. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(15x - 11) = -4(-6x + 5)$$

A. $x \in [0.53, 0.57]$

B. $x \in [0.74, 0.76]$

C. $x \in [-0.59, -0.55]$

D. $x \in [0.71, 0.74]$

E. There are no real solutions.